

An Unusual Begonia Inflorescence

Fred A. Barkley and Kalil S. Boghdan
Northeastern University Botanical Institute and Greenhouses
35 Cambridge Street, Woburn, Massachusetts 01801

It was rather startling to run across a plant with superior carpels in the Begonia collection. One that was remindful of the flowers of Paeonia. It was on a plant whose stems were covered with miniature adventitious embryos, a cultivar with the name "Fairy" (see Plate I).

There were four flowers in the inflorescence. Two normal pistillate flowers (see Plate II), and two teratological flowers with separate hypogynous carpels (see Plate III).

This seemed sufficiently strange and unusual to be worthy of recording. The family Begoniaceae has inferior ovaries, although Hillebrandia has its perianth sufficiently far from the style base as to have the ovary only partially inferior, but even so the carpels are firmly united.

The only other references to comparable conditions in Begonia seen by the writers were to a flower with several stamens and two separate superior carpels and with a wing-like growth on the pedicel, which was mentioned and illustrated in an editorial in the Gardeners' Chronicle ("Hybrid Begonias", Gardeners' Chronicle, Series 3, 2: 560. 1887.), and in a recent article by George Kalmbacher ("Begonia Flowers", Begonian 38: 32-34. 1971.).

J. D. Hooker (Curtis's Botanical Magazine 122: t. 7457. 1896.) remarks that the male flowers of Begonia umbraculifera Hooker f. are polygamous with several carpels at the center of the ring of stamens in those flowers. His illustration shows this condition.



PLATE 1. Begonia plant bearing two normal and two teratological flowers in its inflorescence.



PLATE II. View of a teratological flower (in front) showing absence of ovary, and normal flower (rear right) showing inferior ovary.



PLATE III. Face view of teratological flower showing separate superior carpels.